



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: David B. Wallace

Serial No: 09/167,379 Examiner: Hartman Jr., R.

Filed: 10/06/1998 Group Art Unit: 2786

For: BULK INVENTORY NETWORK SYSTEM (BINS)

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

AFFIDAVIT OF MICHAEL KARPA

I, MICHAEL KARPA, state as follows:

1. All of the events outlined below occurred in the United States of America.
2. On May 30, 1996, I was approached by Dave Wallace regarding the implementation of his system for monitoring a dry bulk material quantity at a remote site that included a detector for producing a first output signal corresponding to an existing material quantity; a remote telemetry unit for receiving the first output signal from the detector and producing a second output signal corresponding to the first output signal; and a computer coupled to the remote telemetry unit for receiving the second output signal from the remote telemetry unit. The computer would include software for determining the existing material quantity and a projected usage rate for the existing material quantity based on the second output signal.
3. On the week of June 3, 1996, I made a sales call at J.P. Donmoyer in Ono, PA. I was at that time a manufacturer's representative for Kistler Morse, and an employee of Magyar Associates. I presented various types of leveling systems as well as options to retrieve data from a site and transmit that data back to a central computer where the data could be displayed for the logistical purpose of consistent product replenishment in

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accordance with the conception of Dave's invention. I advised Dave that I had experience with a private engineering company, Tri-Star, Inc., who would have the ability to design the complete system to link into either a Kistler Ultra Sonic and/or Kistler load cell detector. I agreed to arrange a meeting with Tri-Star.

4. During the week of June 17, 1996, a second meeting was held at J.P. Donmoyer in Ono, PA including the same individuals as the May 20, 1996 meeting, and also including Walter Maidl, Vice President Sales, Allen Baumbach II, Project Engineer, Tri-Star, Inc., Middletown, PA . The preferred embodiment of Dave's invention was discussed in detail. Tri-Star agreed to produce a working remote telemetry unit (RTU) to be installed at a customer site for an experimental implementation of Dave's invention. The RTU would be able to take a standard 4/20 ma read based on preprogrammed times and transmit that data, via signal line, with no restrictions on distance. A modified SCADA program would be installed in a computer at J.P. Donmoyer which would translate the data in a historical trend analysis, and provide comparisons of variable flow rate changes.
5. On June 12, 1996, I visited the Pennsylvania Steel Technologies (PST) facilities located at Steelton, Pennsylvania, to verify the availability of existing 4-20 line for the purpose of installing a prototype embodiment of Dave's invention for test ("the PST project"). It was determined that there was a need to run 50 yards of signal line to make on-site modem connection.
6. On or about July 3, 1996, Tri-Star Inc., provided a proposal detailing the installation of Dave's invention for the PST project. I had agreed, as a part of this proposal, to provide the I/O Operating System from Control Micro Systems.
7. On or about August 1, 1996, I reviewed a proposal to include an additional silo for injection carbon in the PST project in order to test multiple silos at the PST site.

8. On or about August 27, 1996, Dave Wallace raised concerns over delivery delays of required components. Some reasons for delay on the PST project included:(i) VS/2 didn't ship yet, and (ii) the PST site also required modem activation. I provided a September 27th delivery date for the VS/2 equipment needed for the PST installation.
9. On or about October 28, 1996, the Kistler Morse microcells arrived at the PST site.
10. On or about November 15, 1996, Allen Baumbach II committed to an installation of Dave Wallace's invention at PST Steelton by the following week.
11. On or about December 12, 1996, Tri-Star moved on site at PST Steelton, and the installation of an experimental embodiment of Dave Wallace's invention was begun. Training issues related to the software were encountered at that time.
12. By December 30, 1996, Dave Wallace's invention had been installed and functioning at PST Steelton on a limited basis, but not yielding Dave's expected results. The modem appeared to be hanging up and not closing, with future reads of data not being obtained. Tri-Star advised that the signal line could be the source of the problems. Considerable disagreement occurred among the parties involved as to why Dave Wallace's invention was not functioning properly. Tri-Star agreed to attempt multiple solutions to correct the problems.
13. On or about January 14, 1997, Tri-Star could not resolve the modem problem with the unit installed at that time. Tri-Star suggested that the problems were with the hardware which should be replaced. In addition to the modem issues, the time on the computer installed and programmed by Tri-Star was displaying incorrect times.
14. On or about January 27, 1997, another complete replacement unit was ordered by Tri-Star, through me.

15. On or about January 30, 1997, personnel at Control Microsystems advised that they believed that the problems encountered at the PST site were the result of signal line noise. Employee John Martz tested signal line.
16. On or about February 12, 1997, Tri-Star installed a VS/2 unit. Some improvement was noted in performance of the system, but disruptions of data flow from the on-site remote telemetry unit (RTU) were still encountered and reported to Dave Wallace.
17. On or about February 24, 1997, the same problems with the new hardware (wrong time, disconnects, corrupted data) were reported to Dave Wallace. I had instructed one of the technicians to get involved with Tri-Star to resolve these recurring problems.
18. On or about February 28, 1997, personnel from Tri-Star, found a faulty RS-232 adaptor for the VS/2. They advised that replacement of this component should correct current problems reported to me.
19. On or about April 1, 1997, as a result of the foregoing correction, the system's performance improved. However, when the computer self-booted it would no longer collect data. This was an issue in the off hours at PST and the J.P. Donmoyer facility, when the system was not manned. Allen Baumbach of Tri-Star advised Dave Wallace that he thought that the problem is associated with the Wave Conversion on the Win 11 modem Tri-Star had installed. Allen suggested to replace the modem to correct the foregoing problem.
20. In and around May, 1997, the system performance was still inconsistent in that it worked fine for a period of time, and then for no apparent reason disconnected at the site, with no additional data being transmitted.
21. In and around June, 1997, a second silo of injection carbon was added to the PST RTU. Control screens for the software were programmed at J.P. Donmoyer Operations at Ono, Pennsylvania. This installation provided Dave Wallace the opportunity to test two silos over the same RTU. This

would aid him in evaluating problems still occurring with the original site installation.

22. In and around October, 1997, data reads from the second silo of injection carbon were inconsistent. There were high swings in volume displayed on the screens, which were unrealistic. I was asked by Dave Wallace to evaluate the Kistler Morse monitoring system.
23. In and around December, 1997, I discussed the problems associated with the Tri-Star installation at PST with Dave Wallace, and offered some alternative contact suggestions.
24. On or about January, 1998, I met with Dave Wallace informed me that Steve Lowry would be joining the team to help correct some of the problems encountered at the existing implementation of his invention at PST.
25. On or about April, 1998, Dave Wallace was provided with an engineering report outlining Steve Lowry's recommendations for the correction and proper implementation of Dave's bulk inventory networking system invention at PST in Steelton, Pennsylvania, Nucor, Inc., of Darlington, South Carolina, and at New Jersey Steel.
26. Between May 1, 1998 and September, 1998, Dave, Steve and I undertook to implement Steve's recommendations for operation of Dave Wallace's invention as outlined in his report of April 13, 1998, at the PST project, the Nucor, South Carolina location, and at New Jersey Steel.
27. During the months of August and September 1998, the updated version of the Lookout software and the redesigned remote telemetry unit were installed at the New Jersey Steel and Nucor installations.
28. On September 19, 1998, the implementation of Dave Wallace's invention at the Nucor, South Carolina facility fully functioned according to his express expectations as discussed on May 30, 1996.

29. In and around November, 1998, the implementation of Dave Wallace's invention at the PST facility fully functioned according to his express expectations as discussed May 30, 1996.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Title 18, United States Code, Section 1001, and that such willful false statements may jeopardize the validity of the above-identified application or any patent issuing thereon.

Date: March 6, 2001

Michael Karpa
Michael Karpa

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